

H. Campion photogr.

VII.—On a New Genus and Species of Odonata from Sarawak.—By Dr. F. F. LAIDLAW.

Sub-family CORDULIINAE.

Group CORDULINA.

Metaphya, gen. nov.

Anal loop elongate, with longitudinal bisector; apex blunt, scarcely widened, not spurred. Triangle of hindwing recessed to level of arculus. Discoidal triangles of all four wings, and internal triangles of fore-wings uncrossed. Sectors of arculus united at their origin. Short sector and upper sector of triangle (M₄ Cu₁) slightly divergent in fore-wing. Only one cubito-anal cross nerve in fore and hind-wings. Small species, abdomen markedly constricted after 2. Spindle-shaped in the male for its terminal quarter. Appendages small filiform.

Relationship.*

The classification of the sub-family Cordulinae has recently been discussed by Williamson (1908) Needham (1908 a) and Tillyard (1910). These writers are agreed on a subdivision of the sub-family into groups characterized by the anal area. In the one group, Cordulinae s. str. of Williamson and Needham, Cordulina of Tillyard, the anal loop is elongate with a longitudinal bisector as in most Libellulinae. In the other group, Macromiinae of Williamson and Needham, regarded as including two groups of equal systemic importance by Tillyard, viz., Macromina and Synthemina, the anal area consists of a compact set of cells. Metaphya then falls into the Cordulina group. In this group a number of genera,

^{*}Dr. Ris informs me in a letter that from a study of the venation as seen in the photograph, he is inclined to think it related to Syncordulia.

Cordulia, Somatochlora, etc.,* agree in having the triangle of the hind-wing recessed, the anal loop spurred to some extent at least, and M4-Cu1 of the fore-wing convergent. They may be regarded as forming a natural group I believe, and may be separated from the remaining genera of the Cordulina whose exact inter-relationships are much more difficult to tabulate. Amongst these genera Metaphya must take its place, and I cannot at present indicate its exact position much more clearly than this. In its very simple neuration it resembles Idionyx and Gomphomacromia paradoxa, but differs from both in having the hinder triangles recessed. In this it resembles more especially Libellulosoma and Aeschnosoma, but to me the relationship does not appear close and the character after all is probably one of specialization, hence I believe a more extended study of the morphology of these genera is necessary before an entirely satisfactory classification can be put forward.

DESCRIPTION OF SPECIES.

Metaphya micans n. sp.

Length of abdomen 17.5 mm.

Length of hind-wing 22.5 mm.

Head, upper lip black, vertex metallic blue-black.

Thorax above and at sides entirely of a metallic blue-black.

Abdomen entirely black, above testaceous. I and 2 yellowish brown below with a long brown genital appendage on 2 directed downwards and backwards. 7, 8, 9, 10, flattened from side to side. Terminal appendages short, a little longer than 10, black filiform, the upper pair blunt at their ends. Legs black, very dark brown, where they join the thorax. 'Seven antenodal

Hemicordulia. Bengal, Madagascar, Austromalaysia.

Cordulia. Europe, North America, North Asia.

Procordulia. Austromalaysia, New Zealand.
Somatochlora. Europe, N. Asia, N. America, New Zealand.
Paracordulia. S. America.
Dorocordulia. N. America.

Helocordulia. N. America.

Tetragoneura. N. America. Epicordulia. N. America.

Epitheca. Europe, N. America.

^{*} The genera referred to are:—

cross-nerves in fore-wing. Wings, upper pair hyaline, lower pair tinged with orange-brown slightly. branule upper third white, lower part dark brown.

Type from Sarawak, 1910.

References.

Collections Zoologiques du Baron Edmond de Selys Longchamps, Fasc. XVII. Brussels 1906.

(1908) Entom. News. Vol. 19, pp. 428-431, 1908.

(1908a) Ann. Entom. Soc. America. i, No. 4, Dec. 1908.

(1910) Proc. Linn. Soc. New South Wales, 1910, Vol. XXXV. 2. pp. 312-377. pl. IV-VIII.

I am indebted to Mr. H. Campion for the photograph of Metaphya which illustrates this paper.



Note.—Corrigenda to "A Note on some Bornean Odonata," by F. F. Laidlaw, in Sar. Mus. Journ. No. 1, 1911.
P. 192, lines 5 and 13. For frimrose, read fruinose.
P. 192, line 33. For Raphisma mermis, read Raphisma inermis.